

IN THE CLAIMS:

Please amend the claims as follows:

1. (Previously Amended): A control apparatus for numerical control of a cutting machine comprising a turret which is rotatable about a turret axis and a cutting tool attached to the turret and rotatable about a tool axis, wherein:

an X-axis value (L_{2r}) of a cutting edge of said cutting tool when said cutting tool is rotated about said tool axis to a tool rotation angle (β) is calculated according to the equation of $L_{2r} = L_2 \cdot \cos \beta$; and

an X-axis offset value (ΔX_r) and a Z-axis offset value (ΔZ_r) when said turret is turned to a turret rotation angle (α) are calculated according to the following equations 3 and 4, wherein said X-axis offset value (ΔX_r) after the rotation of said cutting tool and said Z-axis offset value (ΔZ_r) after the rotation of said cutting tool are indicated on a display;

$$\Delta X_r = (\Delta A_z \cdot \cos \alpha - \Delta A_{xr} \cdot \sin \alpha) \times 2 \quad (\text{Equation 3})$$

$$\Delta A_{xr} = L_{2r} + L_4$$

$$\Delta A_z = L_1 + L_3$$

$$\Delta Z_r = -\Delta A_z \cdot \sin \alpha - \Delta A_{xr} \cdot \cos \alpha \quad (\text{Equation 4}),$$

wherein L_1 is a Z-axis value of the tool, L_4 is an X-axis value of the turret and L_3 is a Z-axis value of the turret.

2. (Original): A control apparatus according to claim 1, wherein an X-axis wear compensation value (ΔX_t) and a Z-axis wear compensation value (ΔZ_t) are indicated in relation to said X-axis offset value (ΔX) and said Z-axis offset value (ΔZ).

3. (Previously Amended): A control apparatus according to claim 1, wherein when said

turret is turned to a turning angle (α), an X-axis value of the tool (L2), a Z-axis value of the tool (L1), an X-axis value of the turret (L4) and a Z-axis value of the turret (L3) are converted according to the following equations to calculate said X-axis offset value (ΔX) and said Z-axis offset value (ΔZ);

$$\Delta X = (\Delta A_z \cdot \cos \alpha - \Delta A_x \cdot \sin \alpha) \times 2 \quad (\text{Equation 1})$$

$$\Delta A_x = L2 + L4$$

$$\Delta A_z = L1 + L3$$

$$\Delta Z = -\Delta A_z \cdot \sin \alpha - \Delta A_x \cdot \cos \alpha \quad (\text{Equation 2}).$$

4. (Previously Amended): A control apparatus according to claim 2, wherein when said turret is turned to a turning angle (α), an X-axis value of the tool (L2), a Z-axis value of the tool (L1), an X-axis value of the turret (L4) and a Z-axis value of the turret (L3) are converted according to the following equations to calculate said X-axis offset value (ΔX) and said Z-axis offset value (ΔZ);

$$\Delta X = (\Delta A_z \cdot \cos \alpha - \Delta A_x \cdot \sin \alpha) \times 2 \quad (\text{Equation 1})$$

$$\Delta A_x = L2 + L4$$

$$\Delta A_z = L1 + L3$$

$$\Delta Z = -\Delta A_z \cdot \sin \alpha - \Delta A_x \cdot \cos \alpha \quad (\text{Equation 2}).$$

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)